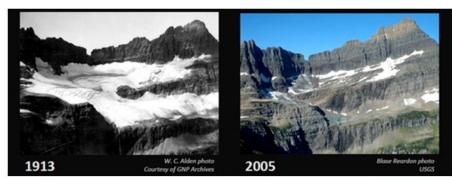
PIE Workshop #5, 04/04/2016 Some Slides from Joint Meeting with Council City of Edina GHG Reduction

Glacier? National Park, MT

Shepard Glacier

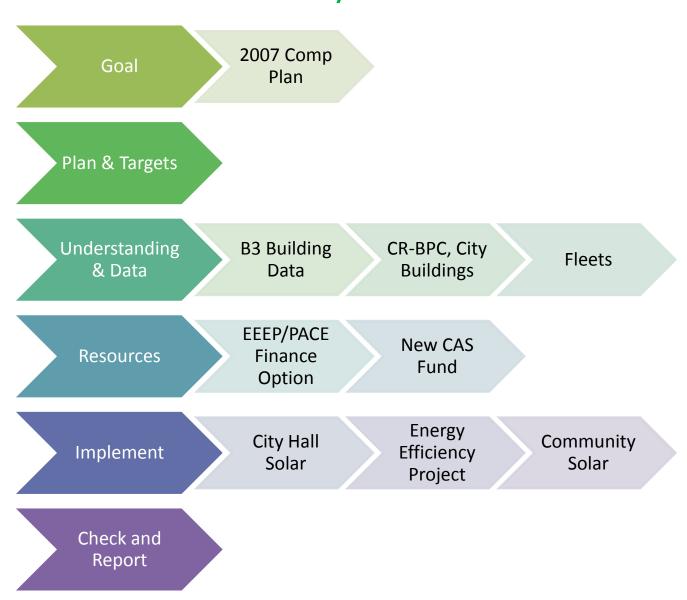


Grinnell Glacier



Photo credit: USGC Repeat Photography Project

Edina Green House Gas Reduction History 30% by 2025



Greenhouse Gas Reduction

30% by 2025

EEC Recommendation, On Going

- EEC work plan GHG reduction is # 1 priority for the following 3 sectors:
 - City Operations
 - Resident
 - Business
- Action 1 Conservation and Sustainability Fund Follow Through

Greenhouse Gas Reduction

30% 2025

EEC Seeking Council's Approval

- Action 2 Partners in Energy Follow Through
 - Identify baseline data for all 3 sectors
 - Baseline data for each sector to be establish to quantify actions toward reduction of GHG.
 - Electricity, Xcel, done. Pls share the data
 - Gas, CPE? Timeline?
 - Propose a plan for each sector
 - Substantial action plan for each sector to make a dent/move the needle, pie? Timeline? 04/04/2016

Note: Sectors are: Business, Resident, City operations
Schools operation is separate from city, it is going to a partnership

Based on the Xcel Data (So Far) Ranking of GHG Producers

- # 1 Electricity is at the top on producing GHG
 - Need to get data for each sector, pie? Timeline?
- #2 Gas
 - How and who can get data from CPE?
- #3 Transportation
 - Depends on regional and other cities to create more public transportation

Sectors Top GHG Producer

Among sectors: Business, resident, city operations

- # 1 Business, the top consumer
 - Top % is 20% of businesses, pie
- #2 Resident
 - We have top % of resident neighborhoods, pie
- #3 City operation
 - We have list of top city operations list, city

Making the Dent/Moving Needle, Towards 30% GHG Reduction by 2025

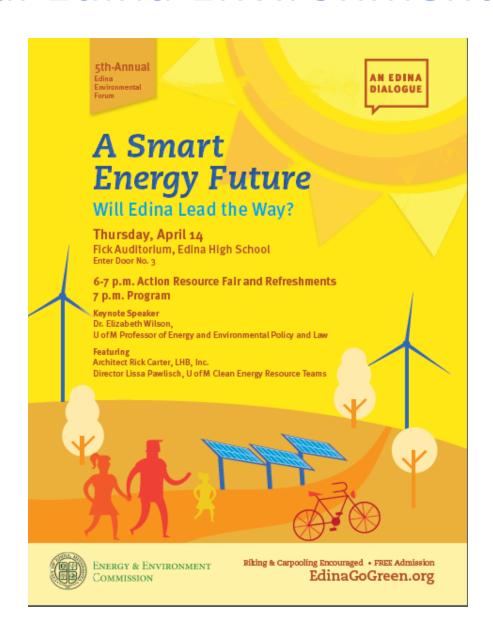
Therefore, to make the dent on the GHG consumption and to be able to reduce GHG, it seems obvious we need to follow the following list.

- #1 business, top % consumers
- #2 city operation, top % operations (To make a good role model)
 - # 3 residents, top % consumers
- #4 Schools to partner and learn/leverage each others path on reducing GHG, 30% by 2025
 - School is one of the good vehicles for campaigning and getting the info out to resident

Making the Dent/Moving Needle, Towards 30% GHG Reduction by 2025

- The #1 item that makes a dent in all above sectors is to subscribe to the renewable energy through Xcel program and other renewable energies if available.
- #2 Efficiency
- #3 Along with the above actions some other actions need to be pursued.
 - Reduction of solid waste
 - Quality of water
 - Transportation

5th Annual Edina Environmental Forum



Appendix Follows:

Partners in Energy Committee (PiE) Energy Vision

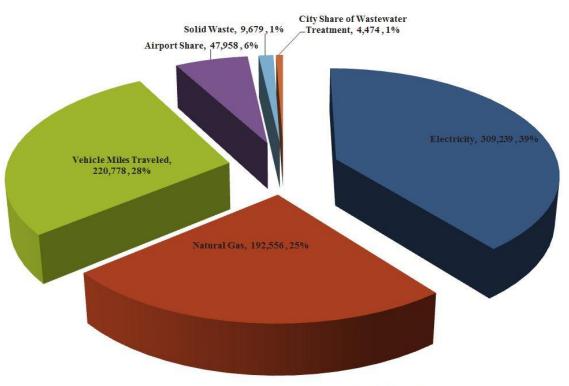
Edina's residents, schools, businesses, and government will successfully reduce the community's greenhouse gas emissions by 30% by the year 2025, through strategies and actions that are sustainable, practical, and measurable.

30% by 2025

GHG Examples for 10 year 30% Reduction Goal

30% by 2025

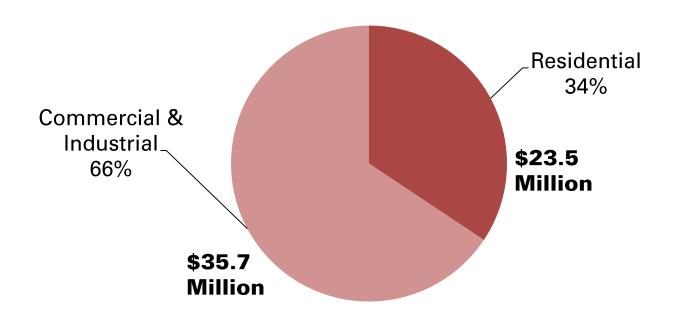
Community Scale



Sector Share of Greenhouse Gas Emissions, 2010 (tonnes)

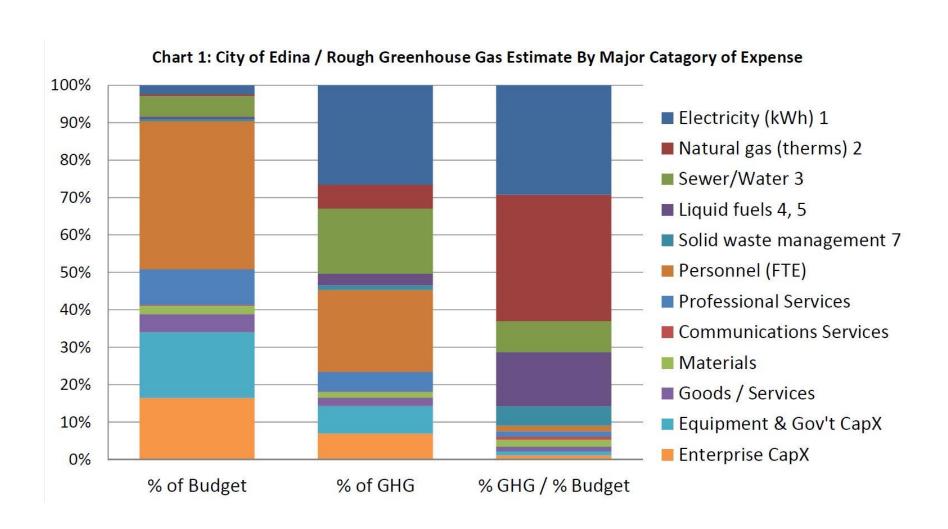
Community Electricity Use

2014 Total Electricity Use 584 million kWh

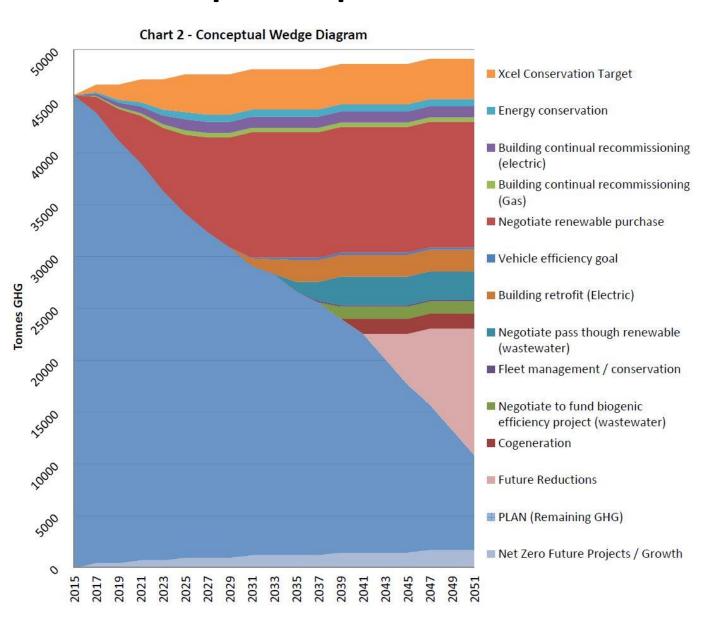




Municipal Operations Scale



Municipal Operations Scale



Scale of GHG Annual Emissions

- 30-90 Tonnes Individual household
- 30,000-50,000 Tonnes Municipal Operations
- 700,000-900,000 Tonnes Community Wide
- 8000 Tonnes Edina Share of MetC Sewer
- 3600 Tonnes Braemar Complex
- 1200 Tonnes City Hall
- 1100 Tonnes Edinborough

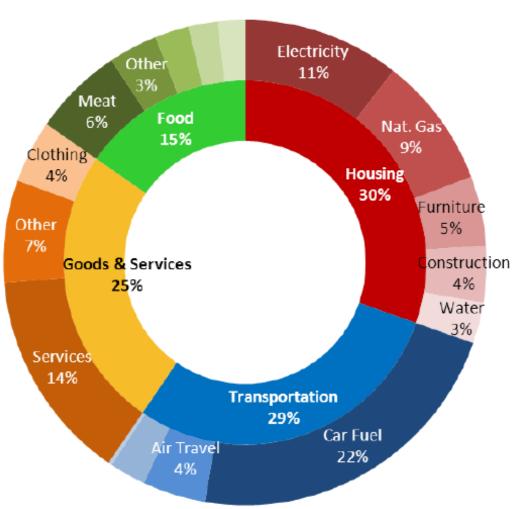
Scale of GHG Offset @ 30%

- 30% Offset for an Individual household wide is \$4-10/month for Windsource
- 30% Reduction for Municipal Operations is approximately \$200,000/year for Windsource
- Appx 15% of overall Reduction and 30% of electrical Community Wide GHG will achieved by Xcel by 2025 through proposed power plan under consideration at PUC.

Scale of GHG Reductions @ 30%

- 30% Reduction for an Individual household wide is approximately equivalent to current car and furnace use.
- 30% Reduction for Municipal Operations is approximately equivalent to current all buildings or all utility operations.
- 30% Reduction Community Wide is approximately equivalent to all current vehicle travel.

Individual Scale



Minneapolis, MN Household Consumption
Inventory 2010 emissions
breakdown from major
sectors

http://www.minneapolismn.gov/www/gro ups/public/@citycoordinator/documents/ webcontent/wcms1p-092812.pdf